United States Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-CA-D05000-2009-14-EA
October 28, 2008

Rand Mountains Management Area Education and Permit Program and Interim ACEC Closure Rescission

Location: **Rand Mountains – Fremont Valley**
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CHAPTER ONE

PURPOSE & NEED

1.1 Introduction:
This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental consequences of the Rand Mountains Management Area (RMMA) Education and Permit Program (EPP) and Interim Western Rand Mountains Area of Critical Environmental Concern (ACEC) Closure Rescission as proposed by the Bureau of Land Management (BLM), California Desert District (CDD), Ridgecrest Field Office. The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives.

The EA will assist the BLM in project planning and will ensure compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether the proposed action would result in any "significant" impacts to the quality of the human environment. "Significance" is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides the analysis to support a determination whether to prepare an Environmental Impact Statement (EIS) or a statement of "Finding of No Significant Impact" (FONSI). A Decision Record (DR), including a FONSI statement, documents the reasons why implementation of the selected alternative would not result in significant environmental impacts (effects) beyond those already addressed in the West Mojave (WEMO) Plan amendment to the California Desert Conservation Area (CDCA) Plan (*March, 13, 2006*)), to which this EA is tiered.

1.2 Background:
The CDCA Plan established the Western Rand Mountains ACEC in 1980. Prior to that, the RMMA was used intensively for off highway vehicle competitive events and casual use. The ACEC was 17,877 in the CDCA Plan and was expanded by 13,120 acres after the approval of the WEMO Plan. The ACEC is adjacent to the Desert Tortoise Natural Area (DTNA) which was established for the protection of the desert tortoise and its habitat. The ACEC area was added in the Record of Decision for the CDCA Plan based on comments from the public on the draft plan and the proposed plan. In the fall of 1989, the BLM placed this area under a temporary emergency quarantine and road closure to protect the tortoise and its habitat. This protective action was lifted in November 1990 after the BLM had reduced the mileage of open routes to 150 miles. The desert tortoise was listed in 1989 as endangered by the U.S. Fish and Wildlife Service (FWS) under emergency listing provisions of the Endangered Species Act (ESA). At approximately the same time the State Fish and Game Commission listed the desert tortoise as threatened under provisions of the California Endangered Species Act. The FWS listed the tortoise as a threatened species in 1990.

In 1994, the BLM developed the Rand Mountains-Fremont Valley Management Plan (Rand Plan) for the entire Rand Mountains and Fremont Valley (65,020 acres), a portion of which was the Western Rand Mountains ACEC. When the decision was made to embark on developing a management plan for the entire Rand Mountains and Fremont Valley, approximately 2000 miles of dirt roads and trails existed in the area which resulted from the intensive off highway vehicle use of the area prior to 1980 when the open area designation was changed. The plan was prepared with support from a technical review team (TRT) comprised of representatives from the mining, off-highway vehicle, wildlife protection and livestock grazing communities, and the California Department of Fish and Game (CDFG). A premise of this planning effort established by the BLM was that the TRT, representing a cross-section of the public interested in the public lands in the affected area, must strive to reach a consensus in a recommendation to BLM for managing the area.

Under the biological opinion issued for the Rand Plan (1-6-90-F-54R), the FWS required the BLM to develop a monitoring and implementation plan to ensure that the management objectives were being met. In this document, the FWS stipulated that:

> Any level of adverse impact or degradation of the management area should require immediate attention. Compliance with vehicular regulations must be good (light noncompliance) in the southwest corner of the management area (west of R45 and south of R50) and must reach excellent in the remainder of the management area within 2 years of adoption of the Plan. If this objective is not met, the majority of routes in the management area would be closed. (p. 6)

The biological opinion contained terms and conditions that were incorporated into the final plan. Critical habitat for the desert tortoise was designated by the FWS in 1994.

On March 16, 2000, the Center for Biological Diversity (CBD), and others filed for injunctive relief in U.S. District Court, Northern District of California against the BLM alleging that the BLM was in violation of Section 7 of the ESA by failing to enter into formal consultation with the FWS on the effects of adoption of the CDCA Plan, as amended, upon threatened and endangered species. On August 25, 2000, the BLM acknowledged through a court stipulation that activities authorized, permitted, or allowed under CDCA Plan may adversely affect threatened and endangered species, and that the BLM is required to consult with the FWS to insure that adoption and implementation of the CDCA Plan is not likely to jeopardize the continued existence of threatened and endangered species or to result in the destruction or adverse modification of critical habitat of listed species.

Lawsuit settlement negotiations resulted in the court approval of a stipulation entitled *All Further Injunctive Relief.* On March 20, 2001, this stipulation became effective. Due to ongoing noncompliance in the Western Rand Mountains ACEC, CBD filed in February 2002, a 60 day notice of intent to file a law suit under the ESA for failure to comply with

the Biological Opinion issued for the Rand Mountains Fremont Valley Management Plan. In March 2002, the BLM and the Center agreed to propose an amendment to the All Injunctive Relief Stipulation by adding the following provision:

> BLM will close and sign all routes within the Western Rand ACEC by March 30, 2002 pursuant to the Rand Mountains Fremont Valley Biological Opinion (1-6-90F 54R). BLM will block major access points needing a physical barrier by September 30, 2002. The closure will not affect administratively approved travel by BLM and its volunteer agents and contractors conducting associated habitat restoration and rehabilitation and other administrative work. The closure will remain in effect until the West Mojave Plan's Record of Decision is signed.

In 2002, BLM issued an interim route closure for the Western Rand Mountains ACEC and implemented the actions proposed in the *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC* (CA650-02-69).

BLM activities in the Rand Mountains Management Area since the interim closure include restoration of the designated closed trails, additional protective fencing, and compliance monitoring in the closure area and at restoration sites throughout the RMMA. Beginning in 2002 and continuing through 2008, BLM Ridgecrest field office has partnered with the California Conservation Corps (CCC) and Student Conservation Association (SCA) to restore designated closed trails in the Rand Mountain Management Area, including the Western Rand Mountains ACEC. During these years, BLM, in partnership with the California State Parks Off Highway Motor Vehicle Recreation (OHMVR) Division, has invested over $2.5 million directly on closed route rehabilitation and habitat restoration in the RMMA.

In the spring of 2004, BLM erected a fence on the west side of R5, creating a buffer between the RMMA and the DTNA. This fence has been cut approximately 12 times since its creation (< 3/year) at the intersection of R40 and R5. In 2006, a northern fence was erected along the boundary of the ACEC and gap fencing was added along R43 to prevent increased access to the closed area. This fencing completely enclosed the ACEC closure area. In 2007, a corridor fence was built along R50 within the closure and additional fencing was added to the east side of R5 creating a completely fenced in corridor through the ACEC.

1.3 Need for the Proposed Action

The WEMO Plan amendment to the CDCA Plan directs the BLM to implement an education and permit program (p. 2-23). WEMO Habitat Conservation Area (HCA) -22a directs the following:

> (HCA-22a) Implement a visitor use permit program. Those desiring to use vehicles in the Rand Mountains would be required to obtain permits prior

to entering the management area. The permit would authorize visitors to utilize the Rand Mountain motorized vehicle access network. To obtain a use permit for the Rand Mountains, visitors would complete a short educational orientation program and, once this is accomplished, could purchase a permit. The details of the visitor use permit program will be developed in consultation with the Kern County Planning Department, the Kern County Sheriff's Department and affected stakeholders.

The educational orientation program would provide an overview and explanation about the Rand Mountains designated route network. It would include information about vehicle use safety, sensitive restoration areas, habitat values and recreation opportunities. The goal would be to increase compliance with applicable rules and regulations.

Payment of a fee would be required to obtain a use permit. This fee would be applied to cover the administrative costs of managing the permit program and, thereby, increase visitor compliance with and contribution towards goals of the Rand Plan.

The interim closure of the ACEC was implemented to protect the desert tortoise and to remain in effect until the formal consultation with FWS on the WEMO Plan amendment was completed and approved for implementation. The Environmental Assessment for the West Rand Mountains ACEC interim closure (CA650-02-69) stated the following purpose and need:

> The need for proposing an interim closure in the Western Rand Mountains ACEC is to provide protection to the desert tortoise *(Gopherus agassizii)*, a federal threatened species, and associated designated critical habitat, from the adverse effects resulting from the use of motorized vehicles in the affected area. This protective action would be in effect for approximately two years until the Section 7 consultation on the California Desert Conservation Area Plan (CDCA Plan) amendments resulting from the West Mojave Planning effort is completed and decisions are approved for implementation.

The WEMO Plan was signed in March 2006.

1.4 Purpose(s) of the Proposed Action

The purpose of this environmental assessment is to identify the effects to the human environment that would result from the proposal to implement an education and permit program for the Rand Mountains Management Area as directed in the WEMO Plan amendment to the CDCA Plan and open selected routes within the ACEC that were closed to motorized vehicle use as stated in the *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC* (CA650-02-69). Off-highway vehicles are defined as "...any motorized vehicle

capable of, or designated for, travel on or immediately over land, water, or other natural terrain ..." (43 CFR 8340.5).

As a result of actions taken by BLM to protect and restore the West Rand Mountains ACEC and greater Rand Mountains Management Area and to promote responsible recreational use, the BLM proposes to rescind the interim closure of the ACEC and implement an education and permit program for the management area. The interim closure was to expire after the WEMO Plan amendment Record of Decision (ROD) was signed, which occurred in 2006.

The EA for the ACEC interim route closures stated the following activities were implemented prior to the route closures:

- An extensive signing effort to identify the open routes of travel and closed routes in the management unit.
- A 17 mile long management fence along the area's south boundary. The objective of the fence was to funnel riders entering the public lands onto the open route system and to block access to closed routes.
- Information portals explaining area regulations and rider responsibilities for appropriate OHV use were installed at each of the 11 entry points to the Rand Mountains. These information boards also provided free information sheets/maps that explained the area use regulations and showed the open trail network - thousands of these handouts have been distributed.
- In 1997 the BLM produced a detailed map of the region showing the open access network - these Cuddeback Lake Desert Access Guides were made available throughout the region in BLM offices and visitor centers.
- In 1999 the Friends of Jawbone produced a highly detailed riding map of the region showing the open route network and explaining area use regulations - over 20,000 of these free maps were distributed between 1999 and 2001.
- BLM also produced a series of recreation opportunity guides that provided information on area use regulations and distributed over 10,000 of these through regional visitor centers, BLM offices, local hotels and at large events such as trade shows and county fairs. This same information was made available on the Ridgecrest Field Office web page
- In addition to signing and bulletins, starting in 1992 and continuing to the present, OHV rangers, law enforcement rangers and volunteers have made personal contact with thousands of riders within the Rand Mountains to provide handouts on use regulations and to explain in person rider responsibilities when visiting this sensitive area. Law enforcement rangers have conducted numerous special operations in the area since 1992 to apprehend and issue citations to riders for violating regulations. From 1992 - 2002, 88 citations were issued in-this area for using closed routes or riding cross-country.
- Beginning in 1997, efforts were initiated in the Rand Mountains to physically block access to closed routes by using hay bales and short segments of snow fencing. Most of the hay bales and snow fences were vandalized or ridden around within six months of their installation. At the same time, BLM has made an effort

to maintain the open routes with adequate signing and occasional road and trail grading.

- In 1998 the BLM initiated an extensive restoration program on closed routes in the Rands with a $125,000 restoration grant from the California State Parks Off Highway Motor Vehicle Recreation (OHMVR) Division and at least $50,000 in labor and materials from BLM funds. Under this effort 125 sites received restoration treatments. Over 1,700 desert shrubs were planted on closed routes; 700 hay bales were placed to block closed trails; and over 6 miles of closed route were mechanically ripped to promote revegetation at the entrance to over 125 closed routes.

It was reported in the West Rand Interim Closure EA that there was non-compliance prior to the interim closure. The following information is excerpted from the EA:

- The fence had been repeatedly cut.
- In a single inventory, BLM staff found 15 separate cuts in the fence line.
- 87% of the routes that had been restored were reopened.
- 195 new tracks were created during a six-day sampling period
- A survey conducted by BLM staff along route R5 in April 2000 found that 90% of the closed routes had recently been ridden (Wash & Kotlarski).
- Another BLM survey around the perimeter of the ACEC in July 2001 recorded 54 closed routes showing recent OHV trespass (Aardahl).
- In March 2002, a systematic inventory of route compliance was conducted along BLM designated routes in the West Rand ACEC. On the west side of route R43, in the area proposed for interim closure, the survey found that of the 99 closed routes examined along this 6.5 mile long road- 92 closed routes had been ridden recently (93%). The survey also found 135 sets of tracks created by cross-country travel in this area. Within the northern section of the ACEC, adjacent to BLM Route R 50, the survey reported that of the 75 closed routes examined - 69 had been recently ridden (92%) and 101 sets of tracks generated by cross-country travel were observed along this 4.5 mile long route. On the east side of the Desert Tortoise Natural Area, along the primary north-south route traversing the ACEC (Route R5), the survey reported that of the 149 closed routes observed – 145 of these had been recently ridden (97%). In addition to riding on closed routes, 101 sets of new tracks generated by cross-country travel were observed along this route.

BLM activities in the Rand Mountains Management Area since the interim closure include restoration of the designated closed trails, additional protective fencing, and compliance monitoring in the closure area and at restoration sites throughout the RMMA.

Beginning in 2002 and continuing through 2008, BLM Ridgecrest field office has partnered with the California Conservation Corps (CCC) and Student Conservation Association (SCA) to restore designated closed trails in the Rand Mountain Management Area, including the Western Rand Mountains ACEC. During these years, BLM, in partnership with the OHMVR Division, has invested over $2.5 million directly on closed route rehabilitation and habitat restoration in the RMMA.

- All of the existing designated closed routes that were present at the time of the ACEC interim closure have been restored to the line-of-sight (average 80 meters) from the designated routes; R5, R50, R40, R12, R48, R37, R35, R25, and R15.
- To date, 707 sites have been restored within the ACEC closure and an additional 333 sites have been restored within the RMMA outside the ACEC closure.
- 45 miles of designated closed routes have been actively restored to the line-of-sight, protecting over 200 miles of designated closed routes beyond the active restoration to recover naturally.
- All of the designated closed routes within the ACEC, including the 2006 expansion of the ACEC, have been restored to the line-of-sight, effectively reducing habitat fragmentation in the 31,000 acre area.

Restoration on the sites consists of planting vertical mulch (dead nurse plants), live outplanting, transplanting, soil decompaction, soil pitting and seedbank transfer, and additional innovative restoration and disguising techniques.

In the spring of 2004, BLM erected a fence on the west side of R5, creating a buffer between the RMMA and the DTNA. This fence has been cut approximately 12 times since its creation (< 3/year) at the intersection of R40 and R5. In 2006, a northern fence was erected along the boundary of the ACEC and gap fencing was added along R43 to prevent increased access to the closed area. This fencing has completely enclosed the ACEC closure area. In 2007, a corridor fence was built along R50 within the closure and additional fencing was added to the east side of R5 creating a completely fenced in corridor through the ACEC. No data on current fence cuts exists. BLM will record all fence cuts and repairs after the initiation of the permit program and rescission of the interim ACEC closure.

In April of 2007, prior to erecting the R5 and R50 corridor fences, CA Desert District Chicago Botanic Garden (CBG) interns monitored all the restoration sites along R40, R5, and R50 within the ACEC closure. 329 restoration sites were evaluated for signs of OHV trespass. Of these:

- 96% had no sign of OHV trespass
- 3.6% had light OHV trespass (1-3 OHV tracks)
- 0.3% had moderate trespass (4-6 tracks), and
- none of the sites had heavy trespass (> 6 OHV tracks) (Gartland 2007).

Outside the ACEC closure area, the compliance rate declines by approximately 10%. Data collected by the Student Conservation Association (SCA) Desert Restoration Corps (DRC) during the winter of 2006 on 130 restoration sites outside the ACEC closure area showed that:

- 89% of the sites had no or light trespass (68% and 21%, respectively) and
- 11% had moderate or heavy trespass (5% and 6%, respectively) (Hughes 2007).

Additional monitoring performed by BLM staff in 2008 on 139 sites along routes R5 and R50 shows similar data within the ACEC closure area. This data was collected after installation of the R5/R50 corridor fence. A summary of the data reports:

- 96% of the sites had no or light trespass (85% and 11%, respectively)
- 4.3% had moderate or heavy trespass (3.6% and 0.7%, respectively) (Woods 2008)

Law Enforcement in the RMMA since the interim closure has increased with consistent aerial surveillance using helicopters, improved on-the-ground enforcement equipment, and coordinated OHV enforcement operations. Beginning in 2003, Ridgecrest BLM law enforcement partnered with the Kern County Sheriff's Department Air Support Unit to employ helicopter surveillance in the RMMA. Since 2003, the Air Support Unit has coordinated with BLM law enforcement during intensive recreational periods, providing support on more than 18 holiday weekends. In addition, Ridgecrest BLM law enforcement has added motorcycles and high-speed all terrain vehicles to its inventory of on-the-ground enforcement equipment, facilitating pursuit of illegal violators and successful apprehension of these violators. BLM Ridgecrest law enforcement has also coordinated large-scale OHV compliance operations in wilderness areas adjacent to limited use recreation areas using BLM staff and volunteers and plans to employ these operations in limited use OHV areas, including the RMMA.

Due the significant increase in compliance, extensive restoration efforts, and increasing law enforcement measures within the RMMA, BLM is confident that it is appropriate to rescind the interim selected route closures within the ACEC, in accordance with the WEMO Plan amendment to the CDCA Plan and the *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC.*

1.5 Conformance with BLM Land Use Plan(s):

The proposed action of developing and implementing an education and permit program in the Rand Mountains MA and rescinding the Western Rand Mountains ACEC interim closure is in compliance with the following Land Use Plans:

- Rand Mountains-Fremont Valley Management Plan (1994)
- West Mojave Plan amendment to the CDCA Plan (2006)
- California Desert Conservation Area Plan, as amended (1980)

1.6 Relationship to Statutes, Regulations, or other Plans:

The proposed action is fully consistent with the following documents:

- Biological Opinion for the West Mojave Plan amendment to the CDCA Plan
- Biological Opinion for the Rand Mountains-Fremont Valley Management Plan
- Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC (CA650-02-69)

Air Quality:

The Kern County Air Pollution Control District (APCD) has state air quality jurisdiction over the project area. The APCD has rules which include the need for permits for stationary sources such as engines, screening plants and such, and fugitive dust emissions. The fugitive dust rule (Rule 401 [Visible Emissions]) says that a person shall not cause or allow emissions of fugitive dust from any active operation to remain visible in the atmosphere beyond the property line of the emission source. Kern County APCD has adopted Rule 402 entitled "Fugitive Dust". The RULE 402 includes specific dust control measures to limit man caused PM10 emissions from construction, demolition, earth moving, bulk material storage and vehicle travel on unpaved roads. Rules include the requirement of control measures and other measures depending upon the size of the operation.

Federal Conformity: Projects within federal air quality nonattainment areas have an additional burden in that a Federal agency must make a determination that its actions conform to the State Implementation Plans before the action is taken (Section 176 (c) of the Clean Air Act as amended (42 U.S.C. 7401 et seq.) and regulations under 40 CFR part 93 subpart W). These authorities address the conformity of general federal actions to SIPs. These authorities state, "No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan".

1.7 Identification of Issues:

1.7.1 Wildlife

- Desert tortoise
- Mohave ground squirrel
- Game bird guzzler access

1.7.2 Air Quality

- Dust particulate

1.7.3 Minerals

- Rights of Way

1.8 Summary:

This chapter has presented the purpose and need of the proposed project, as well as the relevant issues, i.e., those elements of the human environment that could be affected by the implementation of the proposed project. In order to meet the purpose and need of the proposed project in a way that resolves the issues, the BLM has developed a range of action alternatives. These alternatives, as well as a no action alternative, are presented in Chapter 2. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Chapter 4 for each of the identified issues.

CHAPTER TWO

DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Introduction:

The proposal is to implement an education and permit program in the Rand Mountains Management Area and rescind the existing Western Rand Mountains ACEC interim closure in accordance with the West Mojave Plan amendment to the CDCA Plan and *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC* (CA650-02-69), as referenced in the "Need for the Proposed Action" section of this EA (p. 4). The range of alternatives includes a complete rescission of the ACEC interim closure of selected routes, a partial rescission of the interim closed routes, a seasonal closure, and rain closures. The education and permit program is included in each of the alternatives.

2.2 Alternative A – Proposed Action:

The proposed action is to develop an Education and Permit Program (EPP) for the RMMA and open the currently closed routes for recreational use, rescinding the ACEC interim closure. The EPP will focus on informing motorized vehicle operators about the designated route network, desert tortoise information, threats to the desert tortoise, rules and regulations, areas of critical environmental concern, desert habitat restoration, rider safety, and BLM desert planning in the area. The EPP will be implemented in two phases. Phase I will last approximately one year, dependent on available staff and funding, beginning November 1, 2008 and focus on outreach and education associated with the issues in the RMMA and require a no-cost permit to operate a motorized vehicle in the RMMA. Phase II will begin at the termination of Phase I and require motorized vehicle operators to complete an education program, take a written test, and purchase a permit. The cost of the permit will be sufficient to cover all the administrative costs associated with the RMMA EPP, including law enforcement, monitoring, maintenance, and administration of the permit program.

The proposed action will also rescind the interim closure for the ACEC as directed in the *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC* (CA650-02-69) which states: "This protective action would be in effect for approximately two years until the Section 7 consultation on the CDCA Plan amendments resulting from the West Mojave planning effort is completed and decisions are approved for implementation." This proposal would open two of the selected closure routes within the ACEC, R5 and R50, which have been completely fenced to create a corridor through the ACEC. If compliance with the rules and regulations and designated route network in the RMMA remains at acceptable levels (see Monitoring and Compliance section of this EA, p. 22) and no signs of harm to desert tortoises are observed within the ACEC interim closure area during Phase I and into Phase II of the RMMA EPP, BLM Ridgecrest may consider, based on monitoring results and OHV compliance and further consultation with Fish and Wildlife Service, opening

the remaining designated open routes within the ACEC interim closure; R40, R15, R35, R25, R37, R12, and R48.

2.3 Alternative B – No Action:
The No Action proposal would continue the existing interim ACEC closure and not implement an education and permit program for the RMMA. These are inconsistent with the West Mojave Plan amendment to the CDCA Plan and *Environmental Assessment for the interim closure to motorized vehicle use of selected routes within the Western Rand Mountains ACEC* (CA650-02-69).

2.4 Alternative C – Seasonal Closure for Desert Tortoise:
Alternative C includes the proposals for Alternative A and adds a seasonal closure for the R5 and R50 corridor routes defined by the active desert tortoise season, March 1 – October 1. If monitoring shows that there are unacceptable effects on desert tortoise populations and individuals as a result of Alternative A, Alternative C will be considered. If the remaining closed routes in the ACEC are opened as a result of high compliance, they will be included in the seasonal closure.

2.5 Alternative D – Seasonal Closure and Rain Closures:
Alternative D includes the proposals for Alternative C and adds rain closures for the routes in the ACEC interim closure area. Rain restrictions within the ACEC closure area will be implemented during periods of significant precipitation (greater than 0.25 inches) and will be closed proactively when weather forecasts predict a 60 percent chance of significant precipitation in the RMMA.

CHAPTER THREE

AFFECTED ENVIRONMENT

Resource	Initial	Affected Yes	No
Air & Climate Resources		X	
ACEC		X	
Cultural Resources			X
Farmlands, Prime/Unique			X
Floodplain Management			X
Nat. Amer. Religious Concerns			X
T&E Wildlife		X	
T&E Vegetation			X
Water Resources			X
Wastes, Hazardous/Solid			X
Wetlands/Riparian Zone			X
Wild and Scenic Rivers			X
Wilderness Management			X
Wildlife Habitat/Species		X	
Fire Management			X
Land Use		X	
Mineral Resources			X
Paleontology			X
Recreation		X	
Rights-of-Way		X	
Livestock Management			X
Soils		X	
Socioeconomic Resources			X
Visual Resources		X	
Wild Horse & Burro Mgmt			X
Special Status Plants			X
Vegetation		X	
Noxious Weeds		X	

ACEC

The proposed action does not affect ACEC designation, but rescinds a previous interim closure, thus allowing travel on the designated open routes under the WEMO Plan.

Cultural Resources

The proposed action has no effect on significant historic properties.

Farmlands, Prime/Unique

No farmlands, prime or unique, occur in the RMMA.

Floodplain Management
The proposed action will not have an affect on floodplain management.

Native American Religious concerns
The proposed action has no effect on known cultural or religious locations.

T&E Wildlife
The desert tortoise, a federally threatened species, occurs in the RMMA and is discussed in detail in the context of this document.

T&E Vegetation
No known Special Status Plants occur on the project area.

Water Resources
Water resources are not affected by the proposed action.

Wastes, Hazardous/Solid
Hazardous and solid wastes are not affected by the proposed action.

Wetlands/Riparian Zone
No wetlands or riparian zones occur in the RMMA.

Wild & Scenic Rivers
No wild & scenic rivers occur in the RMMA.

Wilderness Management
No wilderness occurs in the RMMA.

Wildlife Habitat/Species
The desert tortoise, Mohave ground squirrel, and game birds are addressed in the context of this document.

Fire Management
Fire management is not affected by the proposed action.

Land Use
The proposed action is in conformance with the WEMO Plan Amendment to the CDCA Plan.

Mineral Resources
The proposed action will not affect mineral resources.

Paleontology
The proposed action has no effect on significant paleontological localities.

Recreation
Motorized recreation will be enhanced with the opening of the selected closed routes within the ACEC.

Rights-of-Way
Existing mining claims and rights-of-way may be affected by the permit program. A permit exemption will be available to BLM mining claimants and organizations with rights-of-way in the RMMA.

Livestock Management
Since 1994, livestock grazing in the RMMA has been effectively eliminated. In accordance with the Rand Plan, "Grazing, if allowed, would be managed for the enhancement of the tortoise."

Soils
The proposed action only addresses currently designated open routes in accordance with the WEMO Plan Amendment to the CDCA. It is likely that soils will be positively affected by increased motor vehicle compliance through increased fines and education.

Socioeconomic Resources
Socioeconomic Resources may not be affected by the proposed action. The proposed action may positively affect the local communities near the RMMA if the action is successful and motorized use increases. Alternatively, if the permit cost is prohibitive, the local communities may lose revenue.

Visual Resources
Visual resources may be affected within the RMMA with increased vehicle compliance, resulting in reduced visual scarring. Vehicle compliance, in conjunction with trail restoration, increased fines, and law enforcement, will allow designated closed trails to restore and revegetate.

Wild Horse & Burro Management
No wild horses or burros occur in the RMMA.

Special Status Plants
Numerous plant surveys have been done in the RMMA over the past three decades and, to date, no special status plants have been found in the RMMA.

Vegetation & Noxious Weeds:
Some common species of plants will be destroyed by the vehicles that may drive off the edge of the vehicle routes. No special status plants will be impacted by the proposed action. Noxious weed invasion should not be significant as a result of the proposed action. OHV use was intensive in the RMMA in the 1960's into the 1980's. Since then OHV use and non-compliance has declined substantially in the area. Invasive annual plant species occur in the RMMA currently and species densities are not expected to increase as a result of the proposed action.

Cultural Resources Surveys in the RMMA:

Report #	Report Title	CLASS Acreage And/Or Distance	Sites Discovered
CA-650-2002-40	Rand Mts. ACEC Route 5 Trespass Trails Rehab	CLASS III 29 Acres	0
CA-650-2002-41	Rand Mts. ACEC Rt. 50 Trespass Trails Rehabilitation	CLASS III 21 Acres	0
CA-6502002-45	Rand Mts. Route Maintenance	CLASS II 520 Acres	0
CA-650-2003-02	Rand Mt. ACEC Rt. 40 Trespass Trails	CLASS III 52 Acres	0
CA-650-2003-05	Rand Mts. R25 Trespass Trails	CLASS III 34 Acres	0
CA-650-2003-06	Rand Mts. ACEC R15 Trespass Trails	CLASS III 23	0
CA-650-2003-08	Rand Mts. ACEC R35 Trespass Trails	CLASS III 10 Acres	0
CA-650-2003-09	Rand Mts. Route Restoration R48 Trespass Trails in Sections 25 & 26 T30S, R39E	CLASS III 3 Acres	0
CA-650-2003-10	Rand Mts. Route Restoration R37 Trespass Trails between R25 & R35	CLASS III 12 Acres	0
CA-650-2003-22	Rand Mt. R12 Trespass Trails (fm south intersection w/R43 to north intersection w/R43	CLASS III 13 Acres	0
CA-650-2003-23	Rand Mts. R37 Trespass Trails (fm Intersection w/R25 to intersection w/R43	CLASS III 2 Acres	0
CA-650-2003-26	East Rand Mts. Rts. R10, R12, & R43 High Probability Trespass Trails	CLASS III 1 Acre CLASS II 425 acres	0
CA-650-2003-29	East Rand Mts. R24, R30 (fm R75 to Randsburg-Red Rock Road), R46, R50, R60, R66, R75, R85, R110, R112: High Probability Trespass Trails	CLASS II 597 Acres	0
CA-650-2003-30	East Rand Mts. Rts. R44 & R83 High Probability Trespass Trails	CLASS III 1 Acre CLASS II 229 Acres	2 Historic
CA-650-2003-31	East Rand Mts. Rt 65 High Probability Trespass Trails	CLASS III 48 Acres	0
CA-650-2003-32	East Rand Mts. Rt. R113/115 High Probability Trespass Trails	CLASS III 56 Acres	0

3.1 Introduction:

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area as identified in the Interdisciplinary Team Analysis Record Checklist found in Appendix A and presented in Chapter 1 of this assessment. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

3.2 General Setting:

The Rand Mountains Management Area (RMMA) is located in the southern portion of the Ridgecrest Resource Area of the BLM's California Desert District (CDD). The area consists of approximately 65,020 acres including the Rand Mountains, Fremont Valley, and Koehn Dry Lake. Major access to the area is provided by the Red Rock/Randsburg Road and Randsburg/Mojave Road via Highway 14, Garlock Road, and U.S. 395. The communities of Randsburg, Johannesburg, Red Mountain, and Atolia are located on the east side of the management area. California City borders the area along its entire southern boundary, and the city of Ridgecrest is located 25 miles to the north.

The RMMA is an arid land, desert environment with low precipitation (3-4 inches/year) ranging from 2400 – 3500 feet in elevation. Historical uses include mining, agriculture, off highway vehicle recreation, and livestock grazing. Dominant plant communities within the management area are creosote bush scrub, creosote bush-rocky slopes, Joshua tree woodland, and alkali sink scrub. The creosote bush scrub community found on the bajadas and flats is composed of creosote bush (*Larrea tridentata*), burrobush (*Ambrosia dumosa*), cheesebush (*Hymenoclea salsola*), winterfat (*Krascheninnikovia lanata*), and boxthorn (*Lycium cooperi*). On the rocky slopes between the bajada and the upper portions of the Rand Mountains is a creosote bush scrub community composed of creosote, burrobush, cheesbush, winterfat, California buckwheat (*Eriogonum fasciculatum*), Nevada joint-fir (*Ephedra nevadensis*), and paperbag bush (*Salazaria mexicana*). A Joshua tree woodland community is located on the upper portions of the Rand Mountains. Dominant plants include creosote bush, burrobush, winterfat, and Joshua tree (*Yucca Brevifolia*). An alkali sink scrub community is present around Koehn Dry Lake. Shrubs in this community include allscale (*Atriplex polycarpa*), shadscale (*A. confertifolia*), four-wing saltbush (*A. canescens*), cheesebush, and scalebroom (*lepidospartum squamatum*).

The project area is located at the western edge of the Desert Floristic Province as described in the *Jepson Manual, Higher Plants of California*. It is adjacent to the California Floristic Province and the Great Basin Floristic Province. This has resulted in components from all these provinces occurring in the area. Sawyer and Keeler-Wolf in A Manual of California Vegetation describe the vegetation as series (communities) dominated by shrubs. The creosote bush series is the most common vegetation series in the study area. In addition to the Creosote bush, this series contains burro-bush or bursage and number of other common species. The Joshua tree series is also found in the study area. This series is similar to the Creosote Series with the inclusion of emergent Joshua trees. The vegetation along the washes and around Koehn Dry Lake includes the mixed

saltbush series. The primary plant species in this series is allscale. The vegetation in the area is typical for the area and does not contain any specialized endemic plants or habitats. No known Special Status Plants occur on the project area.

3.3 Elements of the Human Environment and Other Resources Brought Forward for Analysis:

3.3.1 Wildlife:

Desert tortoise: The West Mojave Plan provides life history information on the desert tortoise, including a discussion of threats to the species. This information, with additional data was used by the USFWS to complete the Biological Opinion. The current density of tortoises in the Rand Mountains- Fremont Valley Management Area is unknown, but has declined from an estimated density of 116 per square mile in 1981 to 33 in 1991. The 2001 plot census showed further declines and may have been in the 20s (U.S. Bureau of Land Management, 2006).

A Line Distance Sampling was done over the range of the tortoise in 2001 and came up with encounter rates of 1.45 for the Fremont-Kramer Recovery unit as a whole or an estimated density of 9.58 tortoises per square kilometer (24 per square mile). A line distance sampling study done in 2002, an extremely dry year, resulted in an encounter rate of 0.045 for live tortoises, probably not enough animals to calculate an estimated density. This study produced 10 live tortoises and 173 carcasses, an indication of a continued decline.

Mohave ground squirrel: Even less is known about the densities of Mohave ground squirrels (MGS) in the management area. Trapping studies are required to determine densities and these fluctuate with precipitation. The squirrel relies on annual plants for reproduction in the spring, but requires shrubs like spiny hopsage and winterfat for basic survival. Leitner (2006) found that a density of 300 plants (spiny hopsage and winterfat) per hectare is important for the squirrels. It is therefore important to monitor these two shrub species to ensure that the OHV activity is compatible with a healthy Mohave ground squirrel population. *Atriplex* and *Kochia americana* are other species important to MGS, but less research has been done with them. About 7,000 acres of the management area was classified as "Joshua Tree woodland" with the remainder as "creosote bush scrub" (BLM, 1997), neither very helpful for determining good MGS habitat. For purposes of this EA we would consider all 67,000 acres of the management area potential MGS habitat.

The squirrels are underground from around June/July through February/March, missing much of the most active OHV period of use. We are therefore more concerned with impacts on habitat than individual crushing.

Upland Game Birds/Artificial waters: Chukar, California quail, and mourning dove occur in the management area and are hunted. Artificial waters (guzzlers) were built by CDFG,

BLM and volunteers in the 1950's, 1960s and 1970s. The guzzlers require regular maintenance due to the harsh conditions. Without maintenance the ramps to the water become slick and can lead to wildlife (including tortoises) mortality. Volunteers with Quail Unlimited have worked in Wilderness areas to maintain guzzlers so understand the "minimum tool" approach to maintenance projects. Many guzzlers have bars at the entrance to keep out ravens and other predators as well as the larger tortoises.

3.3.2 Air & Climate Resources:

The management/enforcement of the air quality standards falls on several different jurisdictions. The United States Environmental Protection Agency (EPA) has the primary responsibilities under the Federal Clean Air Act. The EPA had transferred a number of responsibilities to the states and in most cases, regional air quality management districts. The Kern County APCD has jurisdiction over point and area sources in the project area. The state Air Resources Board has jurisdiction over mobile sources.

All of the project area falls within the Mojave Desert Air Basin. Air quality throughout the area is generally good. There are, however, times that portions of the area have not meet air quality standards due to locally generated and/or transported in pollutants. Until recently portions of the area were classified as nonattainment areas for ozone and PM_{10} under state standards and nonattainment for the one hour ozone standard under National Ambient Air Quality Standards. The EPA recently classified the southern portion of eastern Kern County as a federal nonattainment area for the new eight-hour ozone standard. This ozone nonattainment area includes all of the project area. The area is unclassified for the new $PM_{2.5}$ standard.

3.3.3 Rights-of-Way:

The RMMA permit program may affect access to the area. BLM will allow permit exemptions for existing mining claimants, utility companies, and other parties with valid authority to access the RMMA.

CHAPTER FOUR

ENVIRONMENTAL IMPACTS

4.1 Introduction:

The Ridgecrest BLM NEPA interdisciplinary team has determined that the environmental impacts associated with the proposed action are limited to effects on desert tortoise, and these effects will be minimal. Because all known mitigating measures have been included in the Descriptions of the Alternatives, the environmental consequences described below are unavoidable.

4.2 Direct/Indirect Impacts:

4.2.1 Alternative A – Proposed Action:

4.2.1.1 Wildlife (including T&E):

Desert tortoise: Under the proposed permit system and education program, "Tortoises would be less susceptible to: pet collection; animals, burrows, and eggs crushed; gunshot impacts; handling that results in bladder voiding; harassment or mortality by pet dogs; poaching for ceremonial purposes; releasing pet tortoises into wild populations, which may spread disease; translocation, where tortoises are moved outside their home range into other habitats; and vandalism (U.S. Bureau of Land Management, 2005).

The increased awareness of possible tortoises on existing routes should help reduce direct impacts to the species. Opening R5 and R50 would expose additional tortoises to potential direct impacts from motorized vehicles. As OHVs would be on routes and not running cross-country, there would be increased chances of operators spotting a tortoise before running over it. We would expect, with the permit system in place to see the density of tortoises continue to respond to natural conditions. In other words, if we get rain, we would get more tortoises; but if the drought continues, the population would remain low. Opening the remaining routes would open more linear miles for possible tortoise-crushing. If, however, the permit system has demonstrated that riders are more conscientious about watching for and avoiding tortoises, losses should be below the level required to have an increasing population.

The permit/education program should cause more vehicles to run on open routes, and reduce the impacts to soil and vegetation. This would reduce indirect impacts to tortoises. This would affect the density of tortoises over a longer term as shrubs and annuals increase in density as well. The percentage of disturbed area in the management area has been ascertained from low-level aerial photography, and needs to be updated. The trend should be towards increasing vegetative cover.

The project would still have an effect on desert tortoises and their habitat, but the education program should help reduce impacts from OHV activity. We are proposing

therefore, to request concurrence from the USFWS that this action is a "may affect but not adversely affect" situation.

Mohave ground squirrel: The MGS would benefit similarly from an increase in undisturbed soil and vegetation, resulting from the proposed action. Annuals and shrubs desired by this species would do better in undisturbed sites. There is less chance of direct impacts to MGS from the proposed action than tortoises, as the squirrels are more able to avoid OHVs.

Upland game birds: Volunteers would have better access to the existing guzzlers in the West Rand ACEC. They would more likely maintain them, reducing the likelihood to tortoises and other wildlife dying in them as well as keeping them "raven-proof".

Monitoring and Compliance:
BLM should monitor both tortoises and the habitat. Wildlife specialists recommend monitoring the animals as done in the Jawbone/Butterbredt ACEC area using the 1 hectare plot method. Plots would be selected randomly and placed over the management area and read every 3-5 years. These plots provide data on tortoises, qualitative vegetation data, and impacts, which would be helpful in making management recommendations. The number of plots needed would be determined with assistance from the US Geological Survey. We recommend continuing to monitor the Fremont Valley study plot, which is read about every 5 years. Line Distance Sampling, done over the entire range of the tortoise by FWS would help confirm the data gathered.

We also recommend low level infrared or color photography to determine the level of disturbance over the management area. The recommendation is to do this every 5 to 10 years depending on available funding. The habitat monitoring would be applicable for the MGS as well, and we would not recommend trapping studies for the MGS. Since these fluctuate with precipitation and are a state-listed species we would encourage the CDFG to fund the monitoring of this species.

Residual Impacts: With measure incorporated into the proposed action, we would expect reduced direct impacts to tortoises and a slow increase in tortoise and MGS habitat. We would expect no loss from mortality associated with the guzzlers.

4.2.1.2 Air & Climate Resources:
Emissions from the proposed action will be minimal. No significant offsite impacts are anticipated. An increase in fugitive dust during wind storms could occur due to the soil disturbance as a result of the proposed action. Vehicle use will generate PM10 emissions throughout the area. All of these emission levels would be small. The project as proposed does not exceed the *de minimis* emission levels and conforms to the SIP and no further conformity analysis or determination is necessary.

4.2.1.3 Rights-of-Way:
No environmental impacts are expected with respect to rights-of-way for the proposed action.

4.2.1.4 Monitoring and Compliance:
Costs associated with compliance monitoring will be included in the overall cost of the permit after the implementation of Phase II of the RMMA EPP. Monitoring will begin during Phase I and continue through the life of the RMMA EPP. The compliance monitoring will:

- Occur immediately after or during high recreation activity (weekends & holidays)
- Occur at least bimonthly during the desert tortoise high-activity months from March 1 – June 1
- Occur monthly during the rest of the year
- Survey, repair, and geo-reference fence cuts
- Survey and geo-reference impacts to desert tortoises
- Geo-reference any desert tortoise signs or activity
- Survey and geo-reference illegal trespasses
- Monitor guzzlers for impacts to tortoises. May modify guzzlers to make them more "predator-proof" if needed.

Some baseline data exists for fence cuts, illegal trespasses, and compliance. These data will be used to monitor success of the education and permit program on motor vehicle compliance with the designated route network. The goal of the permit program is to reduce non-compliance and a significant increase in non-compliance from baseline numbers will result in a reevaluation of the management decisions regarding the Rand Mountains Management Area, including additional area closures.

Current (post-ACEC closure) compliance monitoring percentages are considered the baseline for future monitoring in the RMMA. Past (pre-ACEC closure) compliance monitoring percentages will signify the thresholds for closing the ACEC interim closure area again to OHV recreation. A significant increase in non-compliance will constitute a greater than 20 percent increase in instances of OHV trespass within the RMMA, a greater than 20 percent increase in fence cuts from existing data within the ACEC interim closure area, or a combination of these data.

If monitoring shows that the desert tortoise population is negatively affected in the ACEC closure area as a result of motorized vehicle use, BLM will reevaluate this management decision. Any sign of harm to desert tortoises observed within the ACEC closure area during Phase I of the RMMA EPP will lead BLM consider Alternatives C and D of this EA.

4.2.2. Alternative B – No Action:
Wildlife (including T&E):
Desert tortoise: There would be no permit system or education program to inform the users of the Management area about the desert tortoise and other wildlife issues. Non-compliance may continue at the present level, with the continued loss of animals from crushing and other factors related to the routes. Impacts to habitat would continue in the areas outside the closed area.

Mohave ground squirrel: The species would be less impacted from direct impacts (crushing by OHV) than tortoises.

Upland game/guzzlers: Maintenance would be harder to do under this alternative that the proposed action, so potential exists for the guzzlers to cause mortality among wildlife.

Residual impacts: With no mitigation or new measures impacts would continue as before.

Air & Climate Resources:
No significant changes in impact from the proposed action. All of the emission levels would remain small.

Rights-of-Way:
Moderately less access than the proposed action.

4.2.3 Alternative C - Seasonal Closure for Desert Tortoise:
Wildlife (including T&E):
Impacts on tortoises would be reduced if the area was closed during the time of year when tortoises are most active. More individuals would survive to reproduce, increasing the rate of growth of the population. Without a current estimate of the density, we can't predict what the density would be in 5 or 10 years. We also don't have good current data on the mortality of tortoises from crushing by OHVs. There would be little impact on habitat, as vehicles would still have the same requirement to stay on route as the other alternatives.

Air & Climate Resources:
Same as proposed action.

Rights-of-Way:
No change in access from the proposed action.

4.2.4 Alternative D - Seasonal Closure and Rain Closures:
Wildlife (including T&E):
This alternative would have similar positive impacts to the seasonal closure. Reducing OHV activity during times when tortoises are active would again reduce crushing by OHVs.

Air & Climate Resources:
Same as proposed action.

Rights-of-Way:
No change in access from the proposed action.

4.3 Cumulative Impacts Analysis:

"Cumulative impacts" are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

4.3.1 Past and Present Actions:

Past or ongoing actions that affect the same components of the environment as the proposed action are:

Implementation of the designated route network throughout the Western Mojave Desert, including DWMAs, in accordance with the WEMO Plan Amendment to the CDCA Plan.

4.3.2 Reasonably Foreseeable Action Scenario (RFAS)

The following RFAS identifies reasonably foreseeable future actions that would cumulatively affect the same resources in the cumulative impact area as the proposed action and alternatives.

Due to the increased education and information about the resource issues and designated route network in the RMMA, increased fines for illegal riding, and monitoring funds for law enforcement, it is reasonable to foresee increased motor vehicle compliance with the designated route network within the area and decreasing non-compliance issues.

It is also reasonable to foresee some route-widening within the corridor routes of R5 and R50. Due to the reduced mileage in the ACEC and R5 and R50 being the only designated open routes in the previously closed area, it is expected that increased vehicle traffic on these routes will necessitate vehicles pulling off the route to allow oncoming traffic to pass or motorcycles and all-terrain vehicles may venture off the designated route to avoid oncoming vehicles. Under the Biological Opinion for the West Mojave Plan, vehicles are allowed to stop and park 50 feet from the centerline of the designated routes in Desert Wildlife Management Areas (DWMAs).

4.3.3 Cumulative Impacts:

BLM Ridgecrest is processing applications for solar energy projects, expected to impact thousands of acres. These have been directed away from DWMAs and the Habitat Conservation Area, so that additional habitat important to the tortoise will remain intact.

Opening the routes will not impact undisturbed habitat, in fact requiring permits, with a fee will reduce the use of this area. Those users inclined to go off route are not likely to be the same ones willing to purchase a permit, so will use other areas. We expect to see existing disturbed areas gradually become restored. The Rand Mountains- Fremont Valley Management Plan closed over a thousand miles of routes encompassing at least 2,000 – 3,000 acres, and the West Mojave Plan, supported by the Biological Opinion supported this action. The permit system should allow this restoration to continue and add this acreage to the other protected acreage in the DWMAs and HCA. The cumulative impacts should contribute to the recovery of the tortoise.

Losses of tortoises from climatic conditions and disease are likely to continue as the climate continues to warm up. The additional protections of the plant community here and in the adjacent DTNA and remaining DWMA should offer optimum conditions for survival of those remaining. Loss of tortoises in the area as a whole should not change due to the measures being implemented and ought to carry over to areas outside this area.

The cumulative impacts have been assessed in the WEMO Plan Amendment to the CDCA Plan. The motorized vehicle access network designation process considered: (1) the level of impact of each route; (2) the number, density and intensity of use of each route and its relationship to habitat fragmentation and cumulative effects; and (3) ways to minimize the number and intensity of conflicting land uses (e.g. urban interface, noise, dust, visual impacts) (WEMO p. 2-139). The following is excerpted from the WEMO Plan for cumulative effects to biological resources (desert tortoise) and recreation under the approved alternative:

> **Biological Resources:** The Plan presents cumulative impacts, both positive and negative to most of the covered species. The beneficial cumulative impacts include the establishment of large, unfragmented habitat blocks, measures to reduce tortoise mortality, measures to minimize disturbance impacts to conserved lands and measures addressing unique components of diversity, such as endemic species, disjuncts and habitat specialists. The provision of incidental take areas where permitting is streamlined accommodates development of large acreages of urbanizing lands and degraded habitat. The developed lands put increasing pressure on the conserved lands, from resource extraction, incidental land uses such as utilities and from recreation. The allowable loss of habitat (the ITA) [Incidental Take Area] exceeds conservation in all alternatives. However, most of the habitat in the ITA is no longer occupied by the covered species, and the development projections do not indicate substantial future ground disturbance in the more remote areas away from the cities where the best habitat remains outside the HCA [Habitat Conservation Area].
>
> Cumulatively the habitat loss within the ITA would reduce populations of many common species in a very substantial way. As long as the covered species, which are the rarest, most vulnerable or those with known declines, are adequately conserved in the Habitat Conservation Area, the cumulative impact would not be significant or adverse. The more common species would survive within the HCA and are present in abundance outside the West Mojave as well.
>
> Although large acreages are available as incidental take areas, not all of these lands would be developed or even disturbed during the term of the Plan. The growth projections for urban development can be accommodated on a small fraction of the land outside the HCA. Many areas without water, utilities, or easy access would remain undeveloped,

even from rural residences. They are also available for future recreation areas and for developments such as mining or energy production that can be pursued in remote areas. The allocation of lands for different uses achieved by the West Mojave Plan should not be considered as the final determination of land use for the planning area. It is rather a dynamic process of utilizing the best available science and land use planning to achieve conservation of the species and communities known to be in jeopardy. Technologies of the future can and are expected to alter provisions of the Plan to improve upon the implementation of its objectives.

Overall, however, ACEC management of tortoise DWMAs would constitute a significant beneficial impact relative to BLM management under the current habitat classification. It would augment and refine protection ostensibly provided by the critical habitat designation. ACEC prescriptions would serve as specified management actions that are much more protective than class guidelines given in the CDCA Plan. Specified prescriptions would strengthen protection in places where the BLM Class M and unclassified public lands guidelines would fail to do so.

When placed in context of other developments within the West Mojave, including increased land development, mining and increased recreational use of habitat lands, the reduction in surface disturbance by the elimination of unnecessary and parallel routes and those impacting vehicle-sensitive species would be beneficial and an improvement over the existing situation (the No Action Alternative). This is because larger blocks of relatively undisturbed habitat would be available, creating a lesser chance of vehicle collision, a reduced disturbance factor, and less fragmentation. (WEMO p. 4-136)

Recreation: No significant cumulative impacts are expected. This is due to both the sheer size of the planning area and the many recreational opportunities it provides, and the effectiveness of the design of the route network, which meets the needs of foreseeable commercial and recreational motorized access. Some cumulative effects will occur, however. These would include the following:

• Recreational four-wheel drive and motorcycle use would shift from areas identified as having higher than average densities of desert tortoise sign to those area identified as having less than average or no desert tortoise sign. These shifts would generally be to more mountainous or steeper terrain within the planning area. For example, the closure of motorized routes in the flatter bajadas and wash terrain of the El Mirage, Kramer, Fremont and Superior sub regions would shift such use to the more mountainous portions of those sub regions where more motorized

routes were retained. As a result those areas are likely to see greater recreational use.

• Although many motorized touring routes have been retained in the flatter terrain, those visitors who enjoy this type of experience may find their recreational opportunities somewhat limited within the DWMAs. They may shift their recreational activities to the OHV open areas that have flatter terrain, such as Stoddard and Johnson Valleys. As a result, use of these areas may increase. Low relief areas that are outside of the DWMAs may also see increased motorized vehicle use.

• Lands north and east of the Superior sub region are among those lands transferred by Congress to Fort Irwin. Should this area no longer be available for motorized vehicle recreation, this loss of recreation opportunity, together with the rapidly growing Southern California population and the anticipated continued growth in motorized recreation would displace some visitors onto the smaller remaining BLM land base. Use of western Superior Valley was never particularly high, so the scale of the displacement would be small, but these lands, being removed from major highways and population centers, did offer a remote recreation experience that would no longer be available.

• Although a variety of routes and terrain are afforded by the route system proposed under this alternative, the opportunity to have a "remote experience" is expected to become increasingly difficult during the term of the plan. The cumulative effect of this is likely to be a displacement of those visitors seeking a remote experience, leading them increasingly to visit locations within adjoining, but more remote regions such as the NEMO and NECO planning areas. The scale of this "spillover" is expected to be relatively small, and should not affect the ability of visitors to enjoy a "remote experience" in these areas during the term of the West Mojave Plan. (WEMO p. 4-139)

The West Mojave Plan's route network is one of six that are being implemented within the BLM's California Desert Conservation Area. Four networks were adopted within the last two years for the NEMO DWMAs, the NECO plan, the Coachella Valley Plan, and the Western Colorado Desert (WECO). A fifth network is currently under development, and will address lands within the NEMO planning area that are located outside of tortoise DWMAs. Collectively, these six networks would make 13,134 miles of open routes available for motorized vehicle access and recreation within the CDCA, of which 5,098 miles, or 39 percent, would be within the Western Mojave Desert. Table 4-45a presents a summary of route mileages for these plans. (WEMO p. 4-139)

The West Mojave Plan's public land base is approximately 31% of the public lands located within the CDCA. Its percentage of total routes is somewhat higher than this: 43.1%. Following adoption of all these planning efforts, approximately 37.6% of the CDCA's open routes would be located in the West Mojave planning area. Approximately 60.6% of route closures would occur within the western Mojave Desert. These figures reflect the much higher historic usage of West Mojave public lands, due primarily to their location immediately adjacent to the Los Angeles metropolitan area and the rapidly urbanizing Antelope and Victor Valleys, and the continuing urban interface issues that affect the planning area. The West Mojave route network has been designed, however, to provide access to recreation venues identified by field surveys and to meet commercial and other access needs, in a manner compatible with sensitive species conservation; see preceding discussions in this chapter. Field surveys confirm that all routes actually exist on the ground, an important improvement over the network temporarily adopted following "Interim" closures imposed in 2001 (prior to completion of field surveys): approximately 9 percent of the "Interim" routes do not, in fact, exist on the ground. "Interim" closures were imposed prior to the identification, by field surveys, of the precise locations of recreation venues and other motorized access needs. By contrast, the designers of the June 30, 2003 network had this field information in hand, as well as more current biological data, and were able to address access and species needs more effectively. The West Mojave network would to connect seamlessly with the adjacent NEMO, NECO and Forest Service networks, so the regional network of motorized vehicle access routes is projected to function as an effective whole. Although some spillover into adjacent NEMO and NECO lands is possible the scale of this is expected to be relatively small (see above). As a result, cumulative impacts on recreation and motorized access needs would be minor. (WEMO p. 4-140)

CHAPTER FIVE

CONSULTATION AND COORDINATION:

5.1 Introduction:

The issue identification section of Chapter 1 identifies those issues analyzed in detail in Chapter 4. The issues were identified through the public and agency involvement process described in sections 5.2 and 5.3 below.

5.2 Persons, Groups, and Agencies Consulted:

BLM Ridgecrest contacted FWS on October 15, 2008 to initiate informal consultation on the proposed action. On October 23, 2008, a letter was submitted to FWS requesting concurrence that further consultation, pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended, on the desert tortoise (*Gopherus agassizii*) and its critical habitat, is not necessary.

Table 5-1:
List of all Persons, Agencies and Organizations Consulted for Purposes of this EA

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Ray Bransfield	US Fish and Wildlife Service	Informal Consultation
James Weigand	BLM State Ecologist	Quality Control
Sandra McGinnis	BLM State Land Use Planner	Quality Control
Larry LaPre	BLM CDD Wildlife Biologist	Quality Control

5.3 Summary of Public Participation:

BLM Ridgecrest coordinated with a Technical Review Team (TRT) comprised of Kern County supervisors and members of the CA Desert District Advisory Council (DAC). Input was accepted from members of the local recreational user groups and environmental interests. The TRT was formed on June 24, 2006 at the request of the DAC and met informally through 2007. Official TRT meetings were held on the following dates in 2008: February 20, July 16, September 3, and October 6.

BLM Ridgecrest informed the Agency Steering Committee of the proposed action on September 25th, 2008. The Agency Steering Committee is group of local stakeholders representing the full spectrum of multiple use interests and meets with the BLM on a monthly basis.

BLM Ridgecrest posted information about the RMMA Education and Permit Program on its public web page on October 27, 2008.

A news release regarding the education and permit program and ACEC interim closure rescission was sent to BLM CDD on October 28, 2008.

BLM Ridgecrest posted this EA on its NEPA web page on October 31, 2008.

5.4 List of Preparers:

Table 5.4: List of Preparers

5.4.1 BLM:

Name	Title	Responsible for the Following Section(s) of this Document
Ron Gartland	Outdoor Recreation Planner	Purpose, Need, Background, and Alternatives
Robert Parker	Wildlife Biologist	Impact analysis for desert tortoise & Mohave ground squirrel
Craig Beck	Recreation Branch Chief	Technical Coordination & Quality Control
Donald Storm	Archaeologist	Impact analysis for cultural resources
Glenn Harris	Natural Resource Specialist	Impact analysis for plants and air quality
Randy Porter	Geologist	Minerals

CHAPTER SIX

REFERENCES AND ACRONYMS

6.1 References Cited:

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6.2 List of Acronyms

ACEC	Area of Critical Environmental Concern
APCD	Air Pollution Control District

ATV	All Terrain Vehicle
BLM	Bureau of Land Management
CBD	Center for Biological Diversity
CBG	Chicago Botanic Garden
CCC	California Conservation Corps
CDCA	California Desert Conservation Area
CDD	California Desert District
CDFG	California Department of Fish and Game
DAC	Desert Advisory Council
DR	Decision Record
DRC	Desert Restoration Corps
DTNA	Desert Tortoise Natural Area
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPP	Education and Permit Program
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
FWS	Fish and Wildlife Service
MGS	Mohave ground squirrel
NEPA	National Environmental Policy Act
OHMVR	Off Highway Motor Vehicle Recreation
OHV	Off Highway Vehicle
RMMA	Rand Mountains Management Area
ROD	Record of Decision
SCA	Student Conservation Association
T&E	Threatened and Endangered
TRT	Technical Review Team
WEMO	West Mojave Plan